

POPULATION PROJECTIONS
FOR ALAMEDA COUNTY AND THE COUNTY PLANNING UNITS
PREPARED BY ALAMEDA COUNTY PLANNING DEPARTMENT

FEBRUARY 1979

Introduction

Two new series of population projections, a Low Series and a High Series, have been developed for Alameda County and the four subcounty planning units by the Alameda County Planning Department. These planning units are defined in Table 1. Total population in each planning unit was projected in five-year intervals for the period 1980-2000 from an estimated 1975 base, and the County totals represent the summation of the planning unit projections. The two projection series provide a range of projected population derived from two sets of specific assumptions concerning fertility, mortality, and net migration.

In summary, Alameda County is projected to grow from an estimated 1,101,600 persons in 1975 to a range of 1,163,600 to 1,246,700 persons by the year 2000, a 5.6 to 13.2 percent increase over the 25-year period. This report represents levels of population which could result if the underlying specific demographic assumptions concerning future fertility, mortality, and net migration trends prove to be accurate. As new information concerning these demographic trends becomes available, the Alameda County Population Projections may need to be revised.

Methodology

Development of the 1975 Population Base

Since six of the thirteen cities and all the unincorporated areas have had recent special census counts undertaken since the 1970 U.S. Census, and countywide population estimates by census tract for January 1, 1978 have been prepared by the Alameda County Planning Department, a January 1, 1975 base population was prepared for each planning unit. The 1975 estimated total population of each planning unit was calculated by adjusting the January 1, 1978 estimates back to January 1, 1975 through the application of the 1970-78 average annual growth rates.

Projection Methodology

The planning unit projections were prepared using a cohort-component method. "Cohort" means that the computation is done by age such that the identity of each age group is retained as it is carried forward through time. "Component" indicates that the population change is the result of interaction of three components of population change: births, deaths, and net migration. Thus, each population cohort was projected into the future in 5-year time increments by adjusting for projected increases from live births, decreases due to deaths, and increases or decreases resulting from in- and out-migration.

The three components of population change are reflected in specific assumptions that are applicable to the county and/or the four planning units. In general, these assumptions were based on analyses of recent past trends in the county and the planning units and of expected regional, state, and national socio-economic trends. The following discussion focuses on the development of specific demographic assumptions underlying the Alameda County Population Projections.

81 01713

INSTITUTE OF GOVERNMENTAL
STUDIES LIBRARY

JUL 26 2024

UNIVERSITY OF CALIFORNIA

- **Fertility:**

To project the birth component, several assumptions were made concerning the fertility of the projected female population residing in each planning unit. Age-specific fertility rates were developed for each planning unit for the period 1980-2000 based on (1) actual age-specific birth data for 1970-76, and (2) the assumption that the post 1975 increase in births would continue temporarily until the post World War II "baby boom" generation had passed through the fertile years (ages 15-44 used herein) after which the long-term downward trend in fertility rates would continue. This assumption is supported by national birth expectation data¹ which indicates a continuing decline in the number of births per woman for women presently in the childbearing ages. The methodology incorporates births occurring to both the expected (survived) resident and net migrant females in each planning unit.

The age specific fertility rates vary by planning unit and produce a completed cohort fertility rate for the cohort of women entering the childbearing years in 1975 (births per woman over her lifetime), by the year 2000 of 1.77 in the Central Metropolitan Planning Unit (CMPU), 1.54 in the Eden Planning Unit (EPU), 2.02 in the Washington Planning Unit (WPU), and 1.98 in the Livermore-Amador Valley Planning Unit (LAVPU).

- **Survival:**

The population at the beginning of each projection period must be adjusted to account for mortality (i.e. resident deaths); therefore, survival rates were developed for each age-group or cohort. By definition, the survival rate is the rate which represents the proportion of the population of a specified age surviving for a specified period of time. The 1970-75 survival rates developed for the county as a whole were used to produce the expected population in each planning unit. The survival rates developed from actual Alameda County death statistics are assumed to be more reflective of local conditions than are the present national survival rates. The 1970-75 County survival rates were then adjusted to reflect the declining mortality projected for the United States in national life tables developed by the U.S. Bureau of the Census in 1976.² These survival rates were used in both the High and Low Series.

- **Net Migration:**

The term "migration" means a permanent change of residence from one geographic area to another. This change includes two migratory flows — people moving into an area and people moving out — with both occurring during the same time period. "Net migration" is simply the difference between the number of persons who move into the area (in-migrants) and the number who move out (out-migrants). Thus, net migration is a residual and no single person can be described as a net migrant.

¹U.S. Bureau of the Census, Current Population Reports, Population Characteristics, Series P-20, No. 325; September, 1978.

²U.S. Bureau of the Census, Current Population Reports, Series P-25, No. 704, "Projections of the Population of the United States, 1977 to 2050," Table B-1, July, 1977.

Net migration assumptions for the planning units were developed from analyses of (1) recent past migration trends in Alameda County and among the planning units, (2) socio-economic characteristics of each planning unit including local efforts to either constrain or encourage population growth, and (3) population projections produced by the State Department of Finance³ and the Association of Bay Area Governments⁴. In addition to the data obtained from other agencies, the Alameda County Planning Department developed age-specific estimates of net migration for each planning unit for the period 1970-75. Specifically, the net migration levels estimated to have been experienced by Alameda County in the two 5-year intervals 1965-1970 and 1970-1975 were used as benchmarks for the 25-year net migration level assumptions for the County in the population projections. The distribution of the "net" migrants among the planning units was based on (a) the estimated 1970-1975 age distribution of net migrants for each planning unit, and (b) anticipated local socio-economic trends. The difference between the two series of projections is that the Low Series assumes fewer net in-migrants to the County over the 25-year period than does the High Series.

Population Projections

Table 1 gives both the High and Low Series projections 1980-2000 by five year increments, and includes the 1975 population base estimates for each planning unit and the county. By the year 2000, the High Series projection for the County is 7 percent higher than the Low Series. The range between the series projections for the planning units in the year 2000 varies slightly with 7 percent for the CMPU, 8 percent for the EDEN PU, 8 percent for the WPU and 5 percent for the LAVPU.

The following analysis focuses on the planning unit projections:

Central Metropolitan Planning Unit

The High Series projects a loss of 13,800 population from an established 558,500 in 1975 to 544,700 in the year 2000.

The pattern of population change, however, shows a gradual decline from 1975-1990 followed by a gradual increase in population in the 1990-2000 decade. The largest decline occurs in the 1975-1980 period consistent with the 1970-1978 trend.

In the Low Series projections, the pattern of population change is one of decline from 1975-1990 with a leveling of the rate of decrease from 1990-2000. The pattern of change among the population cohorts is similar to the High Series.

The loss of population in the two series of projections for the CMPU can be attributed to two sources — net natural decrease (an excess of deaths over births) and net out-migration. The net natural decrease is the result of a combination of an aging population and of generally declining fertility rates for women ages 15-29. During the 1970-1975 pre-projection period, the CMPU experienced heavy net out-migration in a pattern similar to other central cities in the nation; net out-migration was most significant in the 25-39 population cohorts.

³State Department of Finance, Population Projections for California Counties 1975-2020 With Age/Sex Detail to 2000, Series E-150, Report 77 - P-3, December, 1977.

⁴Association of Bay Area Governments, Working Paper, Revised Series 3 Projections, March 15, 1979.

- Eden Planning Unit

The High Series projects a loss of 18,700 population (7.2 percent) from an estimated 267,800 in 1975 to 249,100 in the year 2000. The pattern of population change is one of a continuing decline in total population. By the year 2000, older adults make up a much larger share of the total population than they did in 1975 while the proportion of young adults declines during the projection period.

The Low Series projects a loss of 37,900 or 14.2 percent over the 25-year projection period with the pattern of population change similar to the High Series.

The population declines in both the Low and the High Series in the Eden Planning Unit are the result of net natural decrease and net out-migration. Net natural decrease is the most important cause of the projected population declines. Declining numbers of women in the childbearing age groups are producing fewer children over time, while more persons are projected for the older age groups which are subject to lower survival rates than are the younger age groups. In every five year interval in both projection Series, there is a net natural decrease. The net migration assumptions vary for the two Series. The Low Series assumes a continuation of the 1970-75 negative net migration experience by projecting net out-migration throughout the projection period; the High Series reduces the net out-migration and assumes net in-migration after 1990.

- Washington Planning Unit

The High Series projects a population increase of 120,800 or 69.3 percent from 174,300 in 1975 to 295,100 by the year 2000. There were increases in all age groups with the largest occurring in the age groups 50 and over.

The Low Series also projects steady population growth but at a slower pace. The total population is projected to grow by 98,400 persons or 56.5 percent.

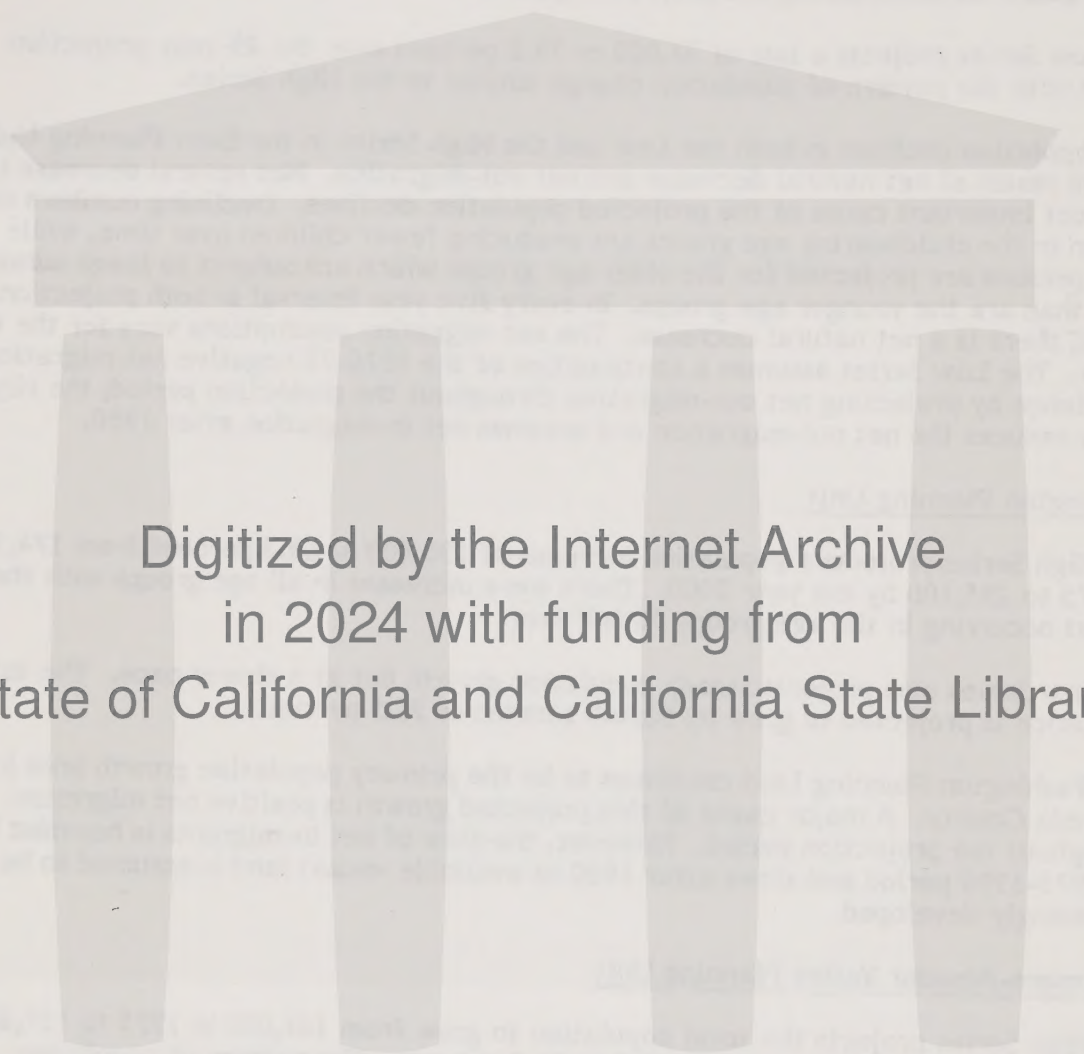
The Washington Planning Unit continues to be the primary population growth area in Alameda County. A major cause of this projected growth is positive net migration throughout the projection period. However, the flow of net in-migrants is heaviest in the 1975-1990 period and slows after 1990 as available vacant land is assumed to be increasingly developed.

- Livermore-Amador Valley Planning Unit

The High Series projects the total population to grow from 101,000 in 1975 to 157,800 in the year 2000, an increase of 56,800 or 56.2 percent. The pattern of population change is overall growth during each five year projection period.

The Low Series projects a 50 percent population increase of 50,000 from 101,000 in 1975 to 151,000 in 2000. The pattern of population change is positive growth throughout the projection period.

The positive population growth is a result of several assumptions. The LAVPU has the highest fertility rates of the four planning units, has net natural increases, has a positive net migration pattern for all age groups, and total net in-migration for each five year projection period. In both Series, the net in-migration was assumed to remain nearly constant (for each 5-year period) in this area due to growth management policies in force in both the Cities of Livermore and Pleasanton. The High Series assumes slightly higher levels of net in-migration (throughout the 25 year period) than does the Low Series.



Digitized by the Internet Archive
in 2024 with funding from
State of California and California State Library

<https://archive.org/details/C123307880>

Tables 2 and 3 illustrate the projected population change for both the High and Low Series respectively for each planning unit and the County, including each five year projection interval.

In summary, the Alameda County Population Projections assume continuing population growth at the county level. The Low Series projects that population in the CMPU and EDEN PU will continue to decline as the population ages and as in-migration is insufficient to offset out-migration. Growth in the WPU and LAVPU will continue but at relatively modest rates. The High Series projects that the population declines in the CMPU and EDEN PU will be more moderate, and that these areas will begin to attract more in-migration sufficient to produce a positive net migration pattern. Growth in the WPU and LAVPU continues at slightly higher rates than in the Low Series.

Recommendation

While neither the High Series nor the Low Series should be considered to be absolute predictions of the future, it is recognized that population projections are needed in order to plan for the future. Alameda County Planning Department will use and distribute for use the High Series for planning purposes. The Low Series is included in the distribution for comparison purposes only.

TABLE 1

PROJECTIONS OF TOTAL POPULATION FOR ALAMEDA COUNTY AND
THE CENTRAL METROPOLITAN, EDEN, WASHINGTON, AND
LIVERMORE-AMADOR VALLEY PLANNING UNITS, 1975-2000

HIGH SERIES

<u>YEAR</u>	<u>COUNTY</u>	<u>CMPU</u>	<u>EDEN</u>	<u>WASHINGTON</u>	<u>LIVERMORE-AMADOR</u>
1975	1,101,600	558,500	267,800	174,300	101,000
1980	1,113,700	543,300	260,700	199,500	110,200
1985	1,152,000	540,900	259,000	229,500	122,600
1990	1,192,800	540,600	258,100	258,100	136,000
1995	1,226,200	542,600	255,200	280,100	148,300
2000	1,246,700	544,700	249,100	295,100	157,800

LOW SERIES

<u>YEAR</u>	<u>COUNTY</u>	<u>CMPU</u>	<u>EDEN</u>	<u>WASHINGTON</u>	<u>LIVERMORE-AMADOR</u>
1975	1,101,600	558,500	267,800	174,300	101,000
1980	1,108,600	541,300	259,700	198,500	109,100
1985	1,134,800	533,200	256,900	224,200	120,500
1990	1,155,900	527,300	251,800	244,100	132,700
1995	1,165,100	518,500	242,400	261,400	142,800
2000	1,163,600	510,000	229,900	272,700	151,000

CMPU = Central Metropolitan Planning Unit including the cities of Alameda, Albany, Berkeley, Emeryville, Oakland, and Piedmont.

EDEN = Eden Planning Unit including Hayward, San Leandro, Castro Valley, San Lorenzo, and other unincorporated areas in Eden Township.

WASHINGTON = Washington Planning Unit including Fremont, Newark, and Union City.

LIVERMORE-AMADOR = Livermore-Amador Valley Planning Unit including the cities of Livermore and Pleasanton, the unincorporated community of Dublin and all the surrounding unincorporated area.

TABLE 2 - HIGH SERIES

Summary of Population Change From 1975-2000

County Total	Population	Change		Average Annual Rate of Change
		Number	Percent	
1975	1,101,600			
1980	1,113,700	12,100	1.1	0.2
1985	1,152,000	38,300	3.4	0.7
1990	1,192,800	40,800	3.5	0.7
1995	1,226,200	33,400	2.8	0.5
2000	1,246,700	20,500	1.7	0.3
1975-2000		145,100	13.2	0.5

Central Metropolitan Planning Unit

1975	558,500			
1980	543,300	-15,200	-2.7	-0.5
1985	540,900	- 2,400	-0.4	-0.1
1990	540,600	- 300	-0.1	-
1995	542,600	2,000	0.4	0.1
2000	544,700	2,100	0.4	0.1
1975-2000		-13,800	-2.5	-0.1

Eden Planning Unit

1975	267,800			
1980	260,700	- 7,100	-2.7	-0.5
1985	259,000	- 1,700	-0.7	-0.1
1990	258,100	- 900	-0.3	-0.1
1995	255,200	- 2,900	-1.1	-0.2
2000	249,100	- 6,100	-2.4	-0.5
1975-2000		-18,700	-7.0	-0.3

Washington Planning Unit

1975	174,300			
1980	199,500	25,200	14.5	2.7
1985	229,500	30,000	15.0	2.8
1990	258,100	28,600	12.5	2.4
1995	280,100	22,000	8.5	1.6
2000	295,100	15,000	5.4	1.1
1975-2000		120,800	69.3	3.1

Livermore Amador Valley Planning Unit

1975	101,000			
1980	110,200	9,200	9.1	1.8
1985	122,600	12,400	11.3	2.2
1990	136,000	13,400	10.9	2.1
1995	148,300	12,300	9.0	2.1
2000	157,800	9,500	6.4	1.3
1975-2000		56,800	56.2	1.8

- Indicates less than 0.1

TABLE 3 - LOW SERIES

Summary of Population Change From 1975-2000

County Total	Population	Change		Average Annual Rate of Change
		Number	Percent	
1975	1,101,600			
1980	1,108,600	7,000	0.6	0.1
1985	1,134,800	26,200	2.4	0.5
1990	1,155,900	21,100	1.9	0.4
1995	1,165,100	9,200	0.8	0.2
2000	1,163,600	-1,500	-0.1	-
1975-2000		62,000	5.6	0.2

Central Metropolitan Planning Unit

1975	558,500			
1980	541,300	-17,200	-3.1	-0.6
1985	533,200	-8,100	-1.5	-0.3
1990	527,300	-5,900	-1.1	-0.2
1995	518,500	-8,800	-1.7	-0.3
2000	510,000	-8,500	-1.6	-0.3
1975-2000		-48,500	-8.7	-0.3

Eden Planning Unit

1975	267,800			
1980	259,700	-8,100	-3.0	-0.6
1985	256,900	-2,800	-1.1	-0.2
1990	251,800	-5,100	-2.0	-0.4
1995	242,400	-9,400	-3.7	-0.7
2000	229,900	-12,500	-5.2	-1.0
1975-2000		-37,900	-14.2	-0.5

Washington Planning Unit

1975	174,300			
1980	198,500	24,200	13.9	2.6
1985	224,200	25,700	13.0	2.5
1990	244,100	19,900	8.9	1.7
1995	261,400	17,300	7.1	1.4
2000	272,700	11,300	4.3	0.9
1957-2000		98,400	56.5	1.8

Livermore-Amador Valley Planning Unit

1975	101,000			
1980	109,100	8,100	8.0	1.6
1985	120,500	11,400	10.5	2.0
1990	132,700	12,200	10.1	2.0
1995	142,800	10,100	7.6	1.5
2000	151,000	8,200	5.7	1.1
1975-2000		50,000	49.5	1.6

- Indicates less than 0.1

U.C. BERKELEY LIBRARIES



C123307880

INSTITUTE OF GOVERNMENTAL
STUDIES LIBRARY

JUL 26 2024

UNIVERSITY OF CALIFORNIA